

But each spring fresh foliage erupts,
 and each summer the growing goes on, from wild ginger to wild geranium
 to purple aster; then all returns to leaf mold for the winter.
 The Hill is romantic in the morning mist, harsh in the noonday sun,
 rich and lush in the shadows at twilight,
 and eerie in the dark of the moon.
 To the average person it is just a patch of rank weeds,
 thick matted and threatening.
 To the appreciative eye it is literally a garden
 of wild flowers, full of surprises and beauties of form and color,
 more wonderful than a suburbanite's well nurtured backyard and often more
 rewarding, because it survives without cost, backbreak, or frustration.

I read it and reread it and as I held it in my hand there came over me the sense of holding a priceless jewel. A professional botanist would have written three times as much and in his pompous style have said half as little. For there is recorded in simple poetic language the history of the area, a description of its physical setting, of its topography and its vegetation, its relation to the human occupants of the area today and in colonial and aboriginal times. Several years of faithful recording bring to light nearly 200 kinds of plants (exclusive of grasses and fungi), here presented in the form of a weekly almanac of blooming dates through spring, summer, and fall. The seasons begin with *Stellaria media* the first week in April and close with golden-rods and asters in September. Each week a new set of blooms appears. There is a list of the trees, of the edible plants and of the medicinal plants, the latter lists in an ethnological and colonial context.

These are only a few of the secrets the Hill is waiting to disclose
 to any searching eye.

A plant census, carried on faithfully through several years,
 revealed in our little half-acre more than 170 species of herbaceous plants,
 a dozen kinds of trees, many dozens of grasses, and a few fungi.
 For many people, each name will recall a floral acquaintance;
 other readers, who have not yet had the pleasure of an introduction,
 may find enjoyment in the poetry of the Latin names
 and in the often quaint charm of the colloquial ones.

The text is in blank verse and the typography flawless. The color plates include *Smilacina racemosa*, *Rubus orarius* and *R. allegheniensis*, *Daucus carota*, *Verbascum thapsus* and *V. phlomoides*. The drawings are botanically accurate and lifelike and the color rendition is excellent.

In a footnote we learn that the author, Anne Ophelia Todd (Mrs. Raymond Dowden), is artist, amateur botanist, teacher and author. The publication, known as CUAS, is produced by the third year students of the Cooper Union School of Art and Architecture of New York City. We raise our glass high in congratulations to all concerned.—H. L. MASON, Department of Botany, University of California, Berkeley.

NOTES AND NEWS

WYOMING PINYON REVISITED. The center of pinyon (*Pinus edulis* Engelm.) distribution falls close to the geographical point, unique in the United States, where four states—Utah, Colorado, New Mexico, and Arizona—come together. Beyond these four states, pinyon extends eastward to touch Oklahoma, southward into Texas and northern Mexico, and westward to California. Older works on tree distribution, and maps copied from them, complete the symmetry of this geographic range by showing pinyon extending northward to southwestern Wyoming. However, a recent treatment of "The Gymnospermae of Wyoming" (C. L. Porter, 1957, Leaflet 28,

Rocky Mountain Herbarium, University of Wyoming) upsets this unusual symmetry by stating that "reports of . . . Pinyon Pine occurring naturally in southern Wyoming are believed to be erroneous, a thorough search for this species having failed to turn it up closer than about twenty miles south of the border in Larimer County, Colorado, and Daggett County, Utah."

In defense of the early references to the occurrence of pinyon northward into Wyoming, the following observations from a 1960 field trip are noted.

1. Pinyon occurs along Sheep Creek, 5 miles south of the Wyoming border, near Manila, Utah (Sec. 1-2, T. 2 N., R. 19 E., Daggett County).

2. Along the Glades, a rock outcrop nearly paralleling the State border near longitude 109 degrees 30 minutes West, scattered pinyons occur on both sides of the border, and are numerous at Minnie's Gap (a break in the Glades) in Wyoming (Sec. 23, T. 12 N., R. 107 W., Sweetwater County).

3. Northward from Minnie's Gap pinyon occurs as a very minor element in the juniper stands. The most northerly pine found is four miles inside Wyoming and five miles east of the Green River (that is, four and one-half miles east of the future shoreline of Flaming Gorge Reservoir; southern boundary of Sec. 34, T. 13 N., R. 107 W., Sweetwater County). This pine is twenty-six inches in diameter at breast height and more than 200 years old, but too decayed for exact dating. Probably pinyons occur north of this old tree as well.

Specimens of native Wyoming *Pinus edulis* from Minnie's Gap (*Peterson 206-60*) have been sent to the Rocky Mountain Herbarium, Laramie, Wyoming, and to the United States Forest Service Herbarium, Washington, D.C. ROGER S. PETERSON, Rocky Mountain Forest and Range Experiment Station, United States Forest Service, Fort Collins, Colorado.

A CONTROVERSIAL TREATMENT OF THE POLEMONIACEAE. The treatment of the Polemoniaceae in Part 4 of the "Vascular Plants of the Pacific Northwest" (Hitchcock, Cronquist, Ownbey, and Thompson, 1959) evokes criticism on the part of an emulator of Polemon, the bellicose philosopher. From numerous cases of disagreement, a few of major importance may be selected for attention.

Eriastrum wilcoxii, reduced to varietal status under the endemic *E. sparsiflorum*. The architecture, leaf-, calyx-, and corolla-characters of these are deemed too dissimilar to justify this. What is really needed is the separation of the comprehensive *E. wilcoxii* into its multiple subspecies or varieties.

Gilia attenuata, submerged in subjective ("taxonomic") synonymy in *G. aggregata*. The corolla-characters of the two are so distinctive, corresponding to pollination by different organisms, that they surely merit some nomenclatural recognition.

Gilia inconspicua, *sinuata*, etc., brought together in a chaotic assemblage. The thorough morphologic studies by the Grants deserve more respectful consideration than this, supplemented as they are by cytotaxonomic work, one of the best presently available means of throwing light on otherwise obscure inter-relationships.

Leptodactylon pungens segregates, reduced to subjective synonymy under one comprehensive species. These are so distinctive in morphology, ecology, and range that they need recognition at some level.

Phlox bryoides, reduced to subjective synonymy under *P. muscoides*. These are so unlike as to call for at least subspecies segregation.

Phlox douglasii, reduced to subjective synonymy under *P. caespitosa*. This is a serious misunderstanding. Judging by their types, as recognized by the systematists of a century, they are wholly unrelated. *Phlox douglasii* has thin dark green acicular leaves covered by long gland-tipped hairs. *Phlox caespitosa* has thickish pale green linear-oblong leaves bearing coarse glandless cilia; its only glandularity consists in a few hairs on the inflorescence-herbage. No intergrades between them are known. They are surely about as distinct species as can exist among the Microphloxes.

The type locality of *P. caespitosa* has been inferred from the label to lie at the mouth of the Flathead River, but McKelvey finds Wyeth on its collection-date to

have been at Flathead Post, latitude $47^{\circ} 35' N.$, longitude $115^{\circ} 12\frac{1}{2}' W.$ * The elevation of the "high hills" thereabouts approaches 6000 feet. Taxon *caespitosa*, then, is the ecad of moderate elevations, while taxon *pulvinata* is the ecad of high country. They do not differ in any major respect, and intergrade completely. If any reduction to subjective synonymy is considered desirable, taxon *pulvinata* is the one needing suppression.

Phlox lanata, reduced to subjective synonymy under *P. hoodii*. This intergrades, however, not with *P. hoodii* but with *P. bryoides*, and the plants at some stations—e.g., Double Springs Pass, Idaho—can not be certainly assigned to one or the other.

Phlox longifolia, interpreted as a grossly comprehensive species, with a host of subjective synonyms. Field study shows that most of these submerged taxa occur so frequently in pure stands and under specialized ecologic or geographic conditions as to merit some degree of nomenclatorial recognition.

Phlox missoulensis, a striking endemic, reduced to varietal status under the wholly unrelated *P. kelseyi*. The latter is a succulent marsh plant with pale, coarsely ciliate leaves, its glandularity, if any, limited to the inflorescence-herbage. The endemic has thin, deep-green leaves, bearing copious long glandular hairs, and grows in dry rocky situations. If it must be reduced in status, then *P. douglasii* would be its closest earlier-named relative. However, students of plant geography, ecology, evolution, etc., find endemics of much interest, and these should be emphasized, not obscured by association with more or less (or un-)related taxa.

Phlox mollis, another endemic, reduced to subjective synonymy under the markedly dissimilar *P. viscida*. As its name implies, the latter is one of the most glandular phloxes known; it has multiflorous inflorescences and is accordingly assignable to Brand's subgenus *Macrophlox*. The endemic has the flowers solitary or in 3's, and so fits into his subgenus *Microphlox*. Its indument is utterly different, consisting of copious woolly hairs on the stems and lower side of leaves, indeed resembling *P. lanata*. Most specimens of *P. mollis* in herbaria have indefinite localities, but in addition to the type station, there is one at Lewis Peak, Washington (latitude $46^{\circ} 3\frac{1}{2}' N.$, longitude $117^{\circ} 59\frac{1}{2}' W.$).

Phlox scleranthifolia, reduced to subjective synonymy under *P. hoodii*. In habit and measurements, except for the slightly narrower leaves, it agrees instead with *P. diffusa*.

Last but not least, comes *Polemonium*. In passing, it should be emphasized that *P. occidentale* was named by Greene provisionally only, and under the current Code of Nomenclature is not valid. However, it is the treatment of *P. pulcherrimum* for which special criticism is called. Many of the taxa made subjective synonyms of this are only remotely related. And what can be gained by classing as merely varietally distinct two taxa as dissimilar as those figured on page 144 as var. *pulcherrimum* and var. *calycinum*? (The latter, by the way, is not the same as *P. calycinum* Eastwood, a Californian endemic). If all the low-growing, simply-pinnate leaved, rotate-campanulate flowered members of the genus are deemed one species, then its name should be *Polemonium reptans* L.

To make "species" so comprehensive that they include multiple discordant elements releases collectors and herbarium curators from having to examine their specimens closely, but is not the way to advance our understanding of a family as complex as the Polemoniaceae. EDGAR T. WHERRY, Botanical Laboratory, University of Pennsylvania, Philadelphia.

*A stupid reviewer of my book on *Phlox* held that my giving latitudes and longitudes made localities difficult to find. Actually the reverse is true: their positions can be ascertained by measurement in any atlas, however few place-names or political boundaries it may show. [The book on *Phlox* above referred to is "The Genus Phlox," Morris Arboretum Monograph III, 1955. Obtainable for \$4.00, 9414 Meadowbrook Ave., Philadelphia 18, Penna.—Ed.]

CNEORIDIUM DUMOSUM (NUTTALL) HOOKER F. COLLECTED MARCH 26, 1960, AT AN ELEVATION OF ABOUT 1450 METERS ON CERRO QUEMAZÓN, 15 MILES SOUTH OF BAHÍA DE LOS ANGELES, BAJA CALIFORNIA, MÉXICO, APPARENTLY FOR A SOUTHEASTWARD RANGE EXTENSION OF SOME 140 MILES.

I got it there then (8068).

I wish to express my sincere thanks to the San Diego Museum of Natural History and particularly to its director, Dr. George E. Lindsay, for making possible the trip on which this interesting specimen was collected; to my companion of the trip, Mr. Glen Ives, then staff artist of the Museum but functioning on the trip as collector of birds and mammals, for much help and encouragement during the field work; to Señor Ricardo Daggett of Bahía de los Angeles, majordomo of the Vermilion Sea Field Station of the San Diego Museum of Natural History, for help in planning and arranging the trip; and to Señor Pepe Smith and his 14-year-old son Favian, both of Bahía de los Angeles, who packed us into the mountains, for many courtesies extended. I am very grateful to Miss Anita Carter, Principal Herbarium Botanist of the University of California, Berkeley, for graciously verifying my determination of the specimen. I also wish to extend my thanks to the editor of the publications of the San Diego Society of Natural History for his many helpful suggestions during the compilation and processing of the data and the writing of the manuscript; to Dr. Helen K. Sharsmith, Señora Herbarium Botanist of the University of California, Berkeley, for her valuable suggestions on expanding the discussion and making the title more precise; to Mrs. Jerry Heller of the Museum staff for her very careful and accurate typing and retyping of the manuscript; and to Mrs. Rosemarie Fiebig of the Museum staff for taking the final manuscript to the post office for mailing. I must also express my deep gratitude to all my former mentors, to whose excellent instruction and training must ultimately be attributed any merit that this unworthy contribution may possess, although, needless to say, any errors are my own: in particular, I would name Professor Ira L. Wiggins and the late Professor LeRoy Abrams, of Stanford University; Professor Robert T. Clausen, of Cornell University; and Professors Lincoln Constance, Herbert L. Mason, and G. Ledyard Stebbins, of the University of California, Berkeley. Last but not least, I cannot fail to mention my deep indebtedness to my parents, without whose early cooperation this work would never have been possible.—REID MORAN, Museum of Natural History, San Diego, California.

PUBLICATIONS OF MARCUS E. JONES AVAILABLE.—Recent correspondence with Mrs. C. A. Broaddus, a daughter of the noted western botanist, Marcus E. Jones, reveals that several of her father's botanical contributions are still available to those interested in purchasing them. These papers are of considerable historical as well as botanical interest and have been virtually unattainable from bookdealers in the past few years. The following works are in print: *Ferns of the West* (1882); *Contributions to Western Botany*, nos. 7, 8, 9, 13, 14, 15, 16, 17 and 18; *Montana Botany Notes* (1910); and *Astragalus, Revision of the North American Species* (1923). Correspondence regarding these publications should be directed to Mrs. C. A. Broaddus, P.O. Box A-1, Carmel, California.—ROBERT ORNDUFF, Duke University, Durham, North Carolina.